Eden J Andes. Are You Picking Up What I'm Putting Down? How Buyers and Sellers on Resale and Secondhand Clothing Mobile Shopping Applications (mis)Communicate. A Master's Paper for the M.S. in I.S degree. May, 2020. 60 pages. Advisor: Chad Haefele

Online shopping has existed since the internet. However, in the last few years, mobile shopping has skyrocketed due to the increased use of mobile phones. This shopping behavior, and the interactions associated with are nuanced and little understood. Where shoppers once did not have a choice in how they consumed the items that a store would present to them, they can now browse listings for items freely from the comfort of their homes. They can pick and choose what listings they want to look at, and what information they want to consume. Conversely, sellers can create content relating to the items they want to sell and choose how they present it. The implications for this are great, though little understood. This study looks at the interaction between these two groups, buyers and sellers, and whether or not the information they exchange is the information that they most want to consume.

Headings:

Information Behavior

Consumer Behavior

Online shopping

ARE YOU PICKING UP WHAT I'M PUTTING DOWN? HOW BUYERS AND SELLERS ON RESALE AND SECONDHAND MOBILE SHOPPING APPLICATIONS (MIS)COMMUNICATE

by
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Introduction

Consumerism in the United States has evolved exponentially since the turn of the 20th century. Ways that buyers and sellers communicate are subtle and multi-faceted. When assessing these information behaviors, it is important to contextualize the experience of shopping and how it has changed over time. While a complete historical overview of consumerism in the 20th century would further contextualize the impact that this evolution has had on current information behaviors, the examples discussed here were chosen to represent larger paradigm shifts. Wimberely (2012) expertly summarizes several characteristics of the shopping experience that also played an important role in the enhancement of these experiences which are helpful to remember when navigating the changing landscape of shopping:

> Indeed, significant themes recur throughout the history of supermarket development. First, the use of labels on product packaging as a means to provide consumer information developed in multiple stages over time. Second, the government-imposed standards used to maintain and ensure quality in food production, processing, and marketing not only improved goods but also established a consistent vocabulary for package information. Third, advertising was used to convey information to broad audiences, target audiences, and even specific individuals. Finally, outside the grocery industry itself, food culture - the ways in which a society thinks about food and eating - consistently changed over time and often influenced shoppers interests, purchasing decisions, and relevant information needs. (p.176)

From department stores to self-service grocery stores, shopping malls, and superstores, each ushered in a new way for sellers to advertise their wares and for buyers to consume

them. Every reincarnation of the shopping experience changed what it meant to “go shopping”.

This history laid the foundation for how people shop on resale and secondhand clothing mobile shopping applications (REMSAs). This study seeks to look at how buyers and sellers communicate on these applications. Specifically, this study looks at whether the information that sellers provide buyers about their wares is the same information that buyers wish to consume. It also looks at what qualities, characteristics, and details that sellers choose to describe their wares, and what governed these decisions.

A (very) Brief History of Shopping

Department Stores

Originating in mid-nineteenth century Europe, department stores were an evolution of the seventeenth and eighteenth century *arcade,* an enclosed promenade consisting of rows of shops with display windows featuring high-end goods that weren't affordable to most classes (Byrne-Paquet, 2003). While these arcades provided an opportunity for people to engage with retailers and make purchases, they were also a gathering place for the upper classes and became a place to see and be seen (Barth, 1980). Economic growth and the expansion of the bourgeois, spurred by the Industrial Revolution, allowed a more broad and diverse mixture of social classes to engage in shopping (Byrne-Paquet, 2003; Lucas, pp 109-110, 2004.). While there are many factors that contributed to the growth of the department store, not all are relevant to the scope of this study. Factors which contribute directly to the contextualization of this study is the empowerment of the shopper, particularly women, that department stores provided. For the first time, women were not sacrificing their safety, or their social reputation or stature, by shopping without a male chaperone (Remus). This empowerment led other businesses to cater to women, such as tea shops, restaurants, and cafes, which in turn empowered women to open their own, women-focused establishments to provide weary female shoppers a safe sanctuary. Department stores also provided choices for the discerning shopper, and buyers were able to walk out with their wares the same day, and even the same hour, that they made the purchase.

Self-service grocery stores

Briefly, grocery shopping in the United States and western Europe consisted of handing a clerk a list of items that one needed and either returning for the items later or waiting while the clerk retrieved them for you. While department stores offered a variety of goods under one roof, in addition to bolstering one's social standing and redefining womens' roles in public spaces, grocery shopping was still fairly unglamorous. The consumer was completely removed from the process of purchasing goods that were, arguably, dearer than any flamboyant clothing or fancy knick-knacks: food. In 1916, a Tennessean entrepreneur named Clarence Saunders upheaved the way Americans, and eventually the world, went shopping: he let customers pick their items out themselves (Ross, 2016). As previously mentioned, Wimberley elucidates several shifts that were ushered in by the changing grocery shopping culture and arguably by Saunders' new shopping methodology. Although she focuses on grocery shopping and food culture, the concepts of standardization, branding, and consumer empowerment reach beyond groceries to all corners of consumer culture, and so her summation of advances in grocery shopping are also being applied here, to department stores, supermarkets, and superstores.

However, none of these has had the impact on retail consumerism quite like the Internet. As recently as September of 2019, massive retail companies such as Forever 21 Inc., Barneys New York Inc., Payless Shoesource Inc., and Sears Holding Corp., have all filed for bankruptcy, "succumbing to the twin challenges of changing consumer tastes and a relentless shift to online shopping" (Reuters, 2019). This paradigm shift and its effects are far-reaching and long-lasting. Due to the magnitude of these shifting trends,

the information behaviors of both shoppers and, more recently, sellers, have altered drastically. The retail experience landscape has been torn down and reshaped into one that is exceedingly complex and little understood. These shifting behaviors, however, have roots in technology and economics.

Consumer-to-Consumer Online Shopping

In order to understand the current resale and secondhand mobile shopping landscape, it is important to understand the business models that serve as their groundwork. While business models have been around since humankind started engaging in trade and commerce, for the sake of this study, I will focus on the consumer-to-consumer (C2C) business model. The C2C business model is a model "whereby customers can trade with each other, typically, in an online environment" (Lim, 2019). After online shopping took off in the mid-1990s, with companies such as Amazon championing a business-to-consumer online shopping business model, other online retailers began to follow suit. However, C2C was still largely absent from the online shopping landscape until 1995, when eBay was created.

eBay

eBay, the preeminent C2C sales website, was the first of its kind. Established in 1995, it rapidly rose in popularity and, by the year 2000 was available in over 150 countries, and opened its "eBay University", where it taught users "how to become master sellers" (ebay, 2019). It helped usher in the era of the "side hustle" and gig economy by allowing everyday people to sell things as a secondary source of income (McDermott, 2017). "As of 2019, eBay's position as a leading C2C retailer remains consistent, falling to only Amazon and Shopify in sales volume (Kim, 2019). Over the course of its lifetime, eBay has continued to add desirable and marketable features to its shopping interface, such as the "Buy It Now" and "Make an Offer" options, and "eBay

Stores", which enables people to open their own "customized online" storefronts (eBay, 2019).

Craigslist

Where eBay represents reinvention within e-commerce, Craigslist represents dedication to their tried and true methods: their signature minimalist design and extremely streamlined C2C business model. Despite this, its role in reshaping online shopping and consumerism is no less impactful. According to its own mission statement, Craigslist keeps things "simple...down-to-earth, honest, very real" and provides "an alternative to impersonal, big-media sites"(Craigslist). Opting out of banner ads and sponsors, Craigslist has served to empower individuals to become entrepreneurs without feeling committed to more commercialized platforms like eBay. Much like the newspaper classifieds of yore, Craigslist allows people to create listings to their liking, with no middle man or third-party involvement.

Re-Commerce

While many trends have contributed to the changing landscape of retail, the concept of "recommerce" is second only to the advent of online shopping itself. First coined by George Colony, CEO of Forrester Research, in an interview with The New York Times, the term originally referred to the practice of redesigning, or "improving" the client-facing side of any given industry, from "publishing… [to] retail… [to] financial services", while neglecting the back-end operations (NYtimes, 2005). Over time, the term was redefined to refer to the refurbishment and resale of electronic goods, and, finally, to include the resale of retail items, including clothing and accessories. This transition was

spearheaded by companies such as Gazelle in the mid-2000s, which involved consumers by enabling them to trade-in their electronics for cash or credit, or to purchase certified refurbished phones and technology (Bray, 2011) .

Market-Proof

The Dot Com of the early 2000s affected all industries, despite its epicenter in the tech world. The recession that followed was far-reaching, with an estimated $1.7 trillion dollars lost, and almost half of all new online enterprises launched from the late 1990s to 2003 shuttered or sold (McCullough, 2018). Of the companies that were left standing "after the dust settled", eBay and Craigslist were among them (Folger, 2019). This, in addition to the convenience of shopping from home in an increasingly busy and complex world, established online shopping as more than a trend, but an institution. Craigslist continued to grow due to the fact that it allowed people to post ads for free, in contrast to local newspapers, and eBay's self-driven features and accessibility allowed people to continue to use it as a secondary source of income.

Information Practice, *Bricolage*, and Shopping

Many factors influence how people behave when they are shopping, and the things they choose to interact with and consume. Brick-and-mortar shopping has a very different set of challenges when enticing customers to their stores, such as keeping them there long enough to justify spending on an item, as opposed to a website, which needs to have an aesthetically appealing and thoroughly user-tested interface (Petro, 2019; Prysiazhniuk, 2018). User experience and cognitive psychology play an undeniable and crucial role in consumer behaviors and mobile shopping. However, these also fall outside the scope of this study. Rather, viewing consumer behaviors through the lens of information behavior theories is appropriate here, though identifying the best suited theories for any given study can be daunting when faced with the magnitude of material available. An overview of the most commonly accepted information behavior theories are presented here, as aspects of each can help inform this study. Data analysis techniques are equally broad; an overview will not be included for the sake of brevity. Rather, this study will employ Grounded Theory, which in turn will be grounded in the concept of *bricolage.* This blending of data analysis methodologies will allow for the greatest flexibility while providing ample structure and guidance

Information Practice

Theories abound regarding information behaviors and how they manifest in different environments. Per Thomson (2018), these behaviors have been reframed from

the idea that "individuals are rationally driven or cognitively 'needy' when they engage with information" (Cox, 2012a; Olsson, 2005; Savolainen, 2007, 2008a; Talja, 1997), to the more modern and autonomous *information practice* idea that they are "knowing, skilled agents who interact with information in both routine and reflexive ways" (Cox, 2012a, Thomson, 2018). Ultimately, this later definition includes sociocultural and circumstantial influences when looking at how people interact with, interpret, and deal with information on a day-to-day basis.

Interacting with shopping applications is a common practice. Using this modern approach for the interpretation of information practices of individuals allows for more expansive insight into what is occurring when buyers and sellers consume, create, and disseminate content on resale and secondhand clothing mobile shopping applications (REMSAs). It is also more efficient than parsing through individual theories deciding which would be best for the sake of this study. To that end, other established theories are still worth acknowledging. In order to incorporate other potentially relevant insights from different theories and to facilitate their seamless integration for a more comprehensive and critical interpretive lens, a "piecemeal" technique was applied to this study. This concept, known as *bricolage*, was first coined by French anthropologist Claude Levi-Strauss as a counter to scientific thought (Maxwell, 2013, pp. 42-43).

Bricolage and Grounded Theory

Levi-Strauss intended *bricolage* to be an explanation of mythological thought, a way to "spontaneously adapt to the situation" via creative employment of the available tools at hand, rather than establishing tools at the onset and using them as prescribed by the associated research community (Maxwell, 2013, pp. 42-43). In the context of this

study, *bricolage* was used as the multi-faceted interpretive lens through which data was analyzed. By piecemealing secondary information behavior theories to supplement the idea of *information practice* as mentioned above, the data provided rich and varied perspectives and insights.

The method of piecing together information and insights as one progresses throughout research is, essentially, the philosopher's version of Grounded Theory. Via Makri (2011, p. 344) Grounded Theory "involves systematically gathering and analyzing data during the research process (Strauss & Corbin, 1998, p. 12) and is 'grounded' in the sense that the theory is heavily rooted in the data and emerges through the process of cyclic data-gathering and analysis." *Bricolage* and Grounded Theory, though similar, differ in that *bricolage* provides foundational elements of theoretical improvisation that serves to strengthen the implementation of Grounded Theory when analyzing qualitative data.

Methodologies

Think-aloud Protocol & PRETAR

Think-aloud protocol, which involves "[asking] test participants to use the system while continuously thinking out loud" (Nielsen, 1993) is generally employed as an exploratory data collection method in usability testing and user research. In Charters' *The Use of Think-aloud Methods in Qualitative Research* (2003), she explains the history of the protocol, and its roots in cognitive psychology. Briefly, think-aloud protocol manifests as "inner speech", a concept put forth by Vygotsky (1962) in *Thought and Language.* Since the nature of "inner speech" is internal, and think-aloud protocols require the participant to verbalize their "inner speech" as they move through a task, Charters makes the argument that "[Vygotsky's] ideas are important to..[understand]... what think-aloud methods can and cannot reveal" (Charters, 2003). Think-alouds are incomplete by nature, as the translation process from thought to speech is long and cognitively tenuous and require a great deal of time-intensive data analysis in order to form coherent themes and identify patterns. Despite this, think-alouds are perfect for offering valuable insight into the thought processes of testing participants, whether the goal is usability or information behaviors.

The protocol was first introduced as a method of cognitive evaluation in psychological testing by Ericsson and Simon (Ericsson, 1993). Due to the malleability of think-aloud protocol, this study employed this method in order to evaluate the information-gathering behavior of consumers as they interact with selected resale- and

secondhand mobile shopping applications. While this method isn't used as frequently in this context, studies using this method as a means to analyze information behaviors in populations are not unheard of. Makri emphasizes the importance of exhaustive detail when describing and reflecting upon think-aloud methodologies and associated data analysis (Makri, 2011). Specifically, Makri focuses efficiency and thoroughness of documentation of methodologies by following the PRET-A-Rapporter (PRETAR) framework, put forth by Blandford et al. (Blandford, 2008). This framework was designed to be exhaustive in its documentation of steps regarding data collection and analysis.

PRETAR details the "stages for designing an evaluation study" and will be the basis of this study:

1. Purpose of evaluation: what are the goals of the study, or the detailed questions to be answered in the study:
2. Resources and constraints: what resources are available for conducting the study and, conversely, what constraints must the study work within?
3. Ethics: what ethical considerations need to be addressed?
4. Techniques for gathering data must be identified.
5. Analysis techniques must be selected
6. Reporting of findings is (usually) the final step.

The structure of this study will follow these stages, which will be elucidated accordingly.

Purpose of Evaluation

The purpose of this study was to evaluate the communication between buyers and sellers on REMSAs, and hopefully gain insight into whether the qualities and details that a seller chooses to elucidate about their items for sale are adjacent or equivalent to the qualities and details that buyers are hoping to learn from the seller's listing. A buyer was defined as someone who passively or actively searched for resale or secondhand clothing on the applications with an intent to purchase an item. A seller was defined as someone who actively sought to sell a piece of resale or secondhand clothing on a REMSA. The motivation behind this lies in the information behaviors of users in correlation to the increasing use of these applications, and the rise in popularity of sustainability in the fashion and lifestyle industries.

Resources and Constraints

Factors involved in this study were varied and far-reaching. Though there is great potential for this study to be an in-depth and multi-disciplinary look at the psychological, social, digital, and economic impacts on mobile shopping application behaviors, constraints existed which limited this to a smaller study. Constraints on time, budget, and researcher and participant involvement all played a role in limiting this, in addition to limited knowledge in study-creation on the part of the researcher.

In particular, the events of COVID-19 and the subsequent quarantine orders that were set in place severely impacted the researcher's ability to conduct the study in person. Ultimately, all think-aloud sessions were conducted digitally via Zoom. While sessions were still recorded and played back, they lacked the very valuable in-person and intimate setting that traditional think-alouds tend to have. While it will remain unknown

whether this transition from physical to remote testing sessions impacted how the participants interacted with and responded to the tasks, it is worth noting that this occurred.

Recruitment

Participants were initially slated to be recruited through flyer dissemination via undergraduate listservs. However, after the methodologies of this study were restructured during the COVID-19 quarantine, recruitment took the form of verbal announcements during Zoom class meetings, wherein the researcher asked fellow students to participate in a research study. Those who were interested in participating in the study were asked to email the research directly using their school-associated emails. The first six emails received were those who participated in the study. Incentives were provided in the form of Amazon gift cards. A total of six participants were recruited. This number was dictated by the cash amount of the incentives and time restrictions due to COVID-19.

Setting

Each participant was sent a Zoom link with a time. Presumably, each participant was in their personal home during each testing session, but that information is not entirely relevant here. In addition to this, some participants employed the use of a Zoom background, masking their settings. Each participant performed their tasks on their personal phones and employed the use of their computers to record the session. In order to do this, participants had to situate themselves in such a way to enable their phone screens to be visible to their computer's cameras. While this initially caused some mild confusion, all participants were able to achieve a position that was conducive to testing.

Ethics

Built into the PRETAR framework are three elements of ethical concern: vulnerable participants, informed consent, and privacy, confidentiality, and maintaining trust. All considerations relating to the possibility of recruiting a vulnerable participant were accounted for. Each participant was informed that this research study received approval from the relevant IRB board. They were also informed of the confidentiality standards that IRB approval guarantees.

Blandford (2008) stresses the importance of maintaining participant privacy and informing participants of the nature of the study and steps taken to ensure privacy. All participants were notified of the nature of the study during recruitment, when Zoom meeting links were sent out, and again just before the testing session. Each participant was asked if their session could be recorded and were given the choice to opt out. In addition to this, participants were informed that no identifiable data would be associated with their sessions, as all names and emails were destroyed at the conclusion of each testing session.

Techniques for Data Collection

Jakob Nielsen advocates the think-aloud method and it's "strength… to show what the users are doing and why they are doing it while they are doing it" (Nielsen, 1993). In order to collect data, the think-aloud technique was employed in this study, as described in a previous section. This was chosen with the belief that participants would provide the most robust and insightful data verbally, in a natural setting, as pertaining to their consumption and creation of content on REMSAs. While the researcher is aware of

think-afters, these were not deemed necessary for this study. Rather, each session was recorded via Zoom, to allow for playback and deeper analysis.

Per Makri (2011), an emphasis was placed on ensuring "that the think-aloud sessions were *true to life* (sic) as possible within [the] study's constraints." Luckily, employing the use of Zoom for all testing sessions allowed participants to be tested from the comfort of their homes. Since it was ideal to have each participant perform as naturally as possible throughout the session, being in a familiar and comfortable environment meant that they could more freely move through the test without feeling as though they were being tested. Prior to the events of COVID-19, testing sessions were to be held in a rented study room. While it was not ideal, it was more convenient for the researcher and participant than having the researcher visit each participant in their homes. However, the data collection methodology for this study was restructured due to quarantine measures and travel restrictions. Luckily, the resulting methodologies were (arguably) more conducive to encouraging participants to be as natural as possible during the test.

For each session, participants were informed beforehand that the tasks would be presented to them in two phases, each phase consisting of two tasks. They were also informed of their role before each phase was begun. In the first phase, the participants were told that they would be interacting with their chosen application in the role of a "buyer". As stated earlier, "buyers" were defined as someone who passively or actively searched for resale or secondhand clothing on the applications with an intent to purchase an item. They were presented tasks which involved searching for a piece of secondhand

clothing. The first task of Phase 1 involved finding something to wear for graduation. The second task of Phase 1 involved finding a pair of jeans that suited their liking.

In the second phase, the participants were told that they would be interacting with their chosen application in the role of a "seller". As previously mentioned, "sellers" were defined as someone who actively sought to sell a piece of resale or secondhand clothing on a REMSA. The first task of Phase 2 asked participants to create a listing for something they wanted to sell. The second task of Phase 2 asked participants how they would address questions about their items for sale, as posed by a potential buyer.

Blandford (2008) discusses the importance of acknowledging the intersection of data collection and ethics. All data collection techniques were conducted within the scope of the aforementioned ethical lenses, keeping the participants' comfort and privacy a priority. No notes were taken throughout the testing sessions to allow full attention to be given to the participant and the session.

Techniques for Data Analysis

Due to the nature of the study, sessions were not transcribed. Rather, Atlas.Ti, a qualitative evaluation software, was employed throughout the analysis process. This was used due to its easy-to-understand interface, and because the magnitude of data collected dictated the use of a software as opposed to manually coding transcriptions. While manually coding transcripts enables researchers to become very well informed of the data, time constrictions due to COVID-19 dictated that manual coding be bypassed in favor of digital coding. Each testing session was watched between five and seven times to ensure a deep familiarity with each individual session, and to account for the decision to bypass transcription, which, by nature, ensures that the researcher reads and rereads data.

During the initial watching session, focus was placed on events considered significant and relevant to the study, including instances where, as a "buyer", the participant selected a listing, tapped it, and evaluated the individual listing, and as a "seller", participants explained which details and qualities of the item they would list, why, and what they would focus on when choosing photos to represent or depict their items. This eliminated extraneous footage and facilitated focus on those parts of the sessions that would provide the most insight. Per *bricolage,* the app that was chosen was also considered, and different "cultural" influences that may have played a factor in the participants information behavior, such as their interest in vintage clothing versus pre-owned modern clothing, their experience with using their chosen app, and their interest in shopping and fashion in general. Per Grounded Theory, watching and rewatching the data allowed for a deeper understanding of behavioral patterns within the *bricolage*-inspired theoretical framework.

After events were marked in the video data using Atlas.Ti's video-coding feature, each clip was watched again and codes were added denoting specific instances of an information practice that the participant engaged in. In the role of "buyer", codes included whether or not the listing photo was a stock photo showing a model wearing the item for sale or a photo taken by the seller, how many photos were included in the listing, if the participant expressed a desire to know more about the item based on the wording in the description, or any verbal acknowledgment or statement relating to the content of the listing. In the role of "seller", codes included what kind of information the participant would include in their hypothetical listing, reasoning behind the features they chose to highlight, what kind of photos they would post, and how they would visually represent

the item. In addition to this, codes were assigned in both roles to any verbal instances where the participant made a comment about the content of a listing they were on, including whether or not they liked the item or chose it, or if they made a comment referring to “If it were me selling this…”.

Codes were rearranged and reconfigured as necessary to further crystalize insights and patterns. In some cases, codes were combined or merged if their differences were insignificant, or some codes were broken down further if more information was revealed upon further inspection. The number of significant events for each participant varied greatly, with the highest occurrence of events at 17 and the lowest at 4. Memos were created for each event, as a notepad and, later, as a crystallization of insights from each event and a summary of the content consumption and creation of the participant.

Definitions of codes and memos referenced here are defined in Appendix A.

Reporting of Findings

Each participant was analyzed individually, as a smaller case study. Each study was split into two initial categories as dictated by the role that the participant was representing: buyer and seller. Analysis of these roles were based on patterns and observations seen via coding. After each was fully examined, results were cross-examined and compared to one another in order to potentially identify patterns in information consumption and creation, or a lack thereof. Each participant’s session is summarized below. A final summation of findings is also discussed. Times presented for each relevant event are formatted 0:00.00 (minutes:seconds:fractions of seconds).

Participant 1

Participant 1 (P1) chose Poshmark as their REMSA . There were 13 total events considered relevant for this study, which includes both roles as buyer and seller. As a buyer, 11 events were recorded, and 2 as a seller. P1 was particularly interested in browsing, and so interacted with a variety of content on the app. Of their buyer interactions, 4 had a combination of seller and stock photos, 4 were seller photos only, and 3 were stock photos only.

The interactions involving both seller and stock photos varied wildly in time spent on the listing, the amount of scrolling, and verbal confirmation that the participant noted a lack of information. The first interaction was 0:04.685. In this time, P1 noted stock and seller photos but did not scroll down to the written description of the item. Instead, they evaluated the suitability of the item based on these photos. The stock photos included a model, while the seller photos displayed the item on a hanger affixed to a wall. The buyer did not comment on how the item was displayed, rather they commented on the style of the item based on the images provided. They were able to make a decision on whether they liked the item from the photos alone.

The second interaction as a buyer was 0:02.482. The listing featured stock photos of a model wearing the item. P1 did not scroll through all the photos, nor did they scroll to or read the description of the item. Rather, they stopped at the second photo in the listing, before making a judgment on the item, and going back to the search page. There were more photos in the listing, but P1 did not view them before returning to the search results page.

The third interaction as a buyer was 0:07.632. Much like the previous interaction, the listing featured stock photos of a model wearing the item. P1 did not scroll passed the

second photo, so it is unknown whether the listing featured seller photos, or a thorough description. However, P1 responded positively to the listing based solely on the two stock photos, and “liked” it in order to save it for later.

The fourth listing was 0:03.703. P3 scrolled through the first three photos of the item, which were stock photos of a model wearing the featured piece. P1 responded very positively to this listing, stating they “liked this one a lot”. They did not scroll down the listing to reveal the other photos featured, or to read the listing.

The fifth listing was 0:08.469. Photos in the listing included stock photos and seller photos of the item on a hanger, and the item’s tag. The buyer did not scroll down to the written description, but responded positively to the listing, saying they would “heart” it, or add it to their list of favorites for later.

The sixth listing was 0:52.1. The buyer looked at the photos for approximately 8 seconds. Photos included stock photos and seller photos of the item being modeled. P1 verbally confirmed the item, before scrolling through all photos to the description, which they read to further evaluate the listing. They noted that there was “nothing” wrong with the item based on the written description provided by the seller, which included a statement indicating that the item was new with tags, and did not describe any flaws. P1 also read comments left by other buyers, which included the measurements of the item and the height of the seller, who was modeling the item in the seller photos. This indicates that the seller did not include relevant information for P1 or other potential buyers, since inquiries were left on the item asking for more information. Despite this, P1 verbally confirms the item based on photos, description, comments, and the seller’s responses to those comments.

The seventh interaction was 0:04.125 and occurred as the moderator was wrapping up the task in order to move into the second task. Due to this, no verbal data from P1 was collected, however this interaction was considered relevant because they chose the listing based on the listing photo, and scrolled through it after it was selected, suggesting that P1 was drawn to it. The photos in this listing were seller photos only, depicting the item on a hanger that was affixed to a wall. P1 did not scroll down to the description or comment area, and therefore did not read them.

The eighth interaction was 1:45.36. This interaction was the only one in P1's session where they noted the title of the listing before clicking into it. The listing included seller photos of the item laying flat, the item folded, the item's tag, the item with props, and the item modeled. P1 scrolled through all photos to the description, where the color of the item as described by the seller in the written description conflicted with the color of the item depicted in the photos provided by the seller. P1 expressed confusion at this, saying that "it is a little confusing because there's pictures of blue jeans and then gray jeans" and mentioned that they would "comment to clarify". This implies that the seller did not provide clear information regarding the actual item for sale, and P1 would have to solicit more information in order to feel confident they understood the listing.

Due to this confusion, P1 stated that they would "check out [the seller's] other listings because I have doubts." After entering the seller's "closet", P1 scrolled through the other listings offered, selecting a listing with a featured photo of the seller modeling an entire outfit. After selecting the listing, however, it was clear the listing was for an item that P1 was not interested in looking at, in this case they were looking for jeans and the listing was for a shirt. This implies that the photo the seller chose as the featured item

photo was misleading, as it portrayed an entire outfit of jeans and a shirt, instead of just the item for sale. Despite this, P1 continued to scroll through the seller's other listings, expressing interest in listings without clicking into them, implying that overall the featured listing photos that the seller chose were sufficient enough for P1 to "like" them, or express verbal confirmation.

Interaction 9 was 0:05.240. The listing included stock photos and seller photos of the item laying flat and also folded. The featured listing photo was a stock photo of a model. P1 scrolled through three (3) photos in the listing, so it is unknown if there were more photos or what was included in the description, if there was one. However, they verbally confirmed they liked the listing, stating they thought the jeans were "cute". They were able to make a positive decision on the item based on photos provided by the seller.

The tenth interaction was 0:31.487. The listing featured photo was a seller photo of the item on a hanger affixed to a wall. P1 scrolled through the rest of the photos, which also included seller photos of the item being modeled, and read the description. P1 responded positively to the listing which included the brand of the item, and also included the measurements.

Interaction 11 was 2:17.686. The feature listing photo was a seller photo of the item modeled. Other seller photos of the item on a hanger, folded, and laying flat were also included. P1 scrolled through all the photos, commenting positively on the appearance of the item, and read through the description. They reacted positively here as well, stating that "this is good because they have the measurements right here, so I can just measure myself ot make sure they would fit." P1 then clicked into the seller's "closet", to "make sure they don't look like they would scam me."

Once in the seller's closet, P1 scrolled through the seller's listings, whose featured listing photos were a mix of stock and seller photos. P1 selected a listing whose photo was a seller's photo of the item folded. Once in the listing, photos were all seller's photos, and included the item lying flat, on a hanger, and modeled. P1 commented positively on the "wash" of the jeans and scrolled through all photos to the description. Because seller did not include the item's measurements or potential flaws, P1 would "probably comment asking what the measurements were, and if there were any rips or stains or something."

P1 transitions to the mindset of a seller for the second half of the session. As their first interaction as a seller, interaction 12, there were no notable events. Instead, P1 discussed the steps they would take to list an item, and elaborated what they would include in their listing, from the content of the photos to the qualities and details of the item that they would include in the description. Since they've sold items on the app, they feel confident that their choices in content are sufficient to sell the item. When prompted to describe how they might list an item, P1 emphasized the importance of stock photos, then seller photos that would act as supplements to the stock photos. They mentioned specifically that the stock photos should "show the entire thing" while seller photos should "show details and things I think that are important." They specifically cited front and back photos, and photos of the tag since "lots of people like to see the tag. It helps."

To describe the item in the title, P1 used descriptive language such as the color and the occasion the item was suitable for. In the description paragraph, they used language that illustrated how worn the item was, the size, the brand, and what occasion the item would be suitable to wear to (ie "Barely used, worn once, beautiful white dress,

almost new, perfect for any occasion, graduation ceremony or party"). They emphasized giving context for the item. They also said they would use other listings from other sellers as inspiration, "to see what other people say" when listing items. Including flaws in the description was also paramount to P1, and any "stitching that might be off, or stains. I would add photos of those, also." Though this study does not look at filters that are included in the app, P1 also mentioned that getting the filters correct is important, to "improve the changes of people finding [the item]."

In the final scenario, P1 was prompted to describe how they would address questions from potential buyers seeking more detail about an item they listed for sale. P1 emphasized the importance of supplying more photos of the item, especially ones that focused on whatever detail the seller was inquiring about. "Building confidence in good, too" in order to encourage the seller to continue shopping the buyer's other listings, and leave a good rating. P1 also mentioned modeling the item so that buyers could "get a feel" for what the item looked like when worn, and also how many times the item was worn by the seller. Other details P1 would mention included whether the item was dry cleaned or any rips or tears. Specifically, if the item had rips or tears, P1 would ensure that they weren't noticeable, in order to "still try and sell it." Ultimately, P1 concluded that responding to buyers' questions at all is important, and doing so as honest as possible.

Participant 2

Participant 2 (P2) chose Poshmark as their REMSA . There were 7 total events considered relevant for this study, which includes both roles as buyer and seller. As a

buyer, 5 events were recorded, and 2 as a seller. Of their buyer interactions, 2 had a combination of seller and stock photos and 3 were seller photos only.

The first interaction was 1:18.829. The listing's featured photo was a stock photo. Several more stock photos of the item followed, showing it from different angles on a model. These were followed by seller photos of the item on a mannequin. P2 noted that they would specifically scrutinize the seller photos of the actual item and emphasized zooming in on it "to see the details." After looking at all the photos, P2 scrolled down to the description and verbally noted that they would look at "what was written" to see if there was anything specific that the seller wanted to mention about the item. P2 also mentioned that if the description is "mostly talking about… the material, I usually skip it." While P2 did not make a verbal confirmation that they would choose that item specifically, they concluded the task by stating that "that's how I'd do it" (ie look for an item for a specific event.

The second interaction was 0:09.495. The listing included seller photos of the item laying flat and also folded. P2 scrolled through the first two photos before claiming "they were too expensive." This was considered relevant, however, because the featured listing photo, a seller photo of the item laying flat, caught P2's attention causing them select the listing.

The third interaction was 0:34.799. The listing's featured photo was a stock photo of a model wearing the item. The listing also included seller photos of the item folded, laying flat, and a tag photo. P2 scrolled through all photos but did not zoom in on any. They stated they would "go through the photos", verbally confirming that the item "looked good." While they scrolled down to the description, they did not appear to read

it, as they were stayed on it for less then a second before scrolling back up to the photos. They were able to judge whether they liked the item based on the photos alone, particularly the seller photos.

The fourth interaction was 0:20.940. P2 scrolled through the listing to the description before the photos loaded and stopped to read it before scrolling back up. They did not verbally confirm or refute the item, nor did they hover on the photos once they loaded. However, the listing's featured photo was a stock photo, and the listing also included seller photos of the item laying flat and also modeled. This was considered a relevant event because P2 was again drawn to the listing based on the featured listing photo of a stock photo of the item.

Interaction 5 was 0:47.549. P2 scrolled through the listing before the photos loaded and stopped on the description. They mentioned that they feel "the pictures [sellers] first put up aren't really showing [the item] accurately." They also mentioned that, because the photos aren't accurate, they can't "get a feel for the condition of [the item]" because it's not always described well in the description. Because of this, P2 claims they "look for more detail", then proceeded to return to the photos of the item again. They verbally confirm that the item is suitable, though this answer seemed hesitant.

At this point, P2 transitioned to the role of a seller, and detailed the process they would go through to list an item for sale. For the title, they chose to include how often it was worn, the size, and the material of the dress (ie "Lightly worn, [the size], [the material]". In the description, P2 specifically mentions elaborating on how worn the item is, what it was worn for, going into detail regarding the material of the dress, and if there

“were any holes or anything like that”. Emphasis was placed on mentioning flaws in particular, since that can impact “your seller rating.”

Finally, P2 discussed how they would field questions about their listed items. P2 emphasized noting the length of time it was owned, how often it was worn, an estimate of the original price. They also mentioned that, if the initial photos weren’t sufficient they would add more, or change the photos if the photo limit was already reached in Poshmark. They would also be clear concerning the differences in wear, such as a rip versus a scratch, stain, tear, or loose stitching.

Participant 3

Participant 3 (P3) chose Poshmark as their REMSA . There were 4 total events considered relevant for this study, which includes both roles as buyer and seller. As a buyer, 2 events were recorded, and 2 as a seller. Of their buyer interactions, 1 had both stock and seller photos, and 1 had seller photos only.

Interaction 1 was 1:10.951. P3 had an idea of what silhouette they were looking for, and so browsed the listings based on what was represented by the featured listing photos. This interaction includes several listings, as P3 looked at them consecutively with little time between. The first listing they selected had a stock featured listing photo of a model wearing the item. In the listing, there were several more stock photos showing the item from different angles. P3 did not scroll down to the description, nor did they provide verbal confirmation that they were satisfied with the listing. Instead, they returned to the search results page, and so it was concluded that this first listing and its content were not satisfactory. As P3 continued, they stated that they “would just go through [the listings]

not really paying attention to shapes that I don't usually wear." This emphasizes the importance of a clear and accurate featured listing photo of the item, stock or seller.

The second listing that P3 looked at in interaction 1 also had a stock featured listing photo. They scrolled through the photos several times, stopping to focus on one that featured the front of the time. They reacted positively to this, and verbally confirmed that they liked the item based on the stock photos provided by the seller.

The second interaction was 0:19.501. The listing featured photo was a seller photo of the item lying flat. The following photos were also seller photos showing close up details of the item, still laying flat. P3 scrolled through the images to the description, which they read, though they made no verbal comment on it. Rather, they scrolled back up to the images and verbally confirmed that they liked the listing.

The third interaction involved P3 creating a listing for an item they would try to sell on the app. For the photos, P3 chose seller photos of the item on a hanger affixed to a wall. They emphasized including the entire item in the photo so that people could "see what it all looks like." For the title, P3 stated the importance of using key words or things that "I think people might search for." These descriptive details included the color, length, and size of the item. For the description itself, P3 went into further details that were mentioned in the title. In addition to this, they also provided context for the item, such as stating what occasions the item would be good to wear to (ie, "Perfect for graduation… a coffee date or a picnic.") P3 also stated they like to include the fact that the item comes from a "non-smoking home. I think that's important for people to know."

The final interaction involved P3 describing how they would field questions about their item from a potential buyer. When responding via comment, P3 stated they would

be “as honest as possible, so that [the person buying] wouldn’t feel bamboozled.” They would accomplish this honesty by stating how exactly the item was worn (tears, rips, stains), how often it was physically worn by the previous owner, or any smells. They wanted to “say something where it described that it was… physically worn, but still in really good shape. I would make sure they knew I took care of my clothes.” P3 emphasized honesty above anything else, also stating that they wouldn’t sell anything on the app that wasn’t sellable anyway, so the “fact that it’s listed means it’s… in good condition.”

Participant 4

Participant 4 (P4) chose Depop as their REMSA. They were the only participant to do so. While this was kept in mind for the analysis, the events, details, and actions characterizing content interaction and buyer-seller communication stayed the same. There were 9 total events considered relevant for this study, which includes both roles as buyer and seller. As a buyer, 7 events were recorded, and 2 as a seller. Of their buyer interactions, 4 were seller photos only, 2 had a combination of seller and stock photos, and 1 had stock photos only.

The first interaction was 0:26.235. The listing featured photo was a seller photo of the item being modeled. The other listing photos were also seller photos and included more modeled photos of the item and also the item on a hanger affixed to a wall. P4 scrolled through all photos but did not read the description of the item before mentioning that “if I like something, I’ll generally go to their closet just to see what else is there.” Once they were in the seller’s closet, all featured listing photos were seller photos. They proceeded to scroll through the other listings offered by the seller before going back to

the initial listing. They did not verbally confirm that they liked the initial listing, nor did they "like" it to save it for later.

The second interaction was 0:02.355. This brief interaction was considered relevant because P4 chose the listing based on the featured listing photo. This was a seller photo of the item being modeled. Once in the listing, the other photos were also seller photos of the item being modeled. P4 did not scroll down to read the description, nor did they verbally confirm or "like" the photo.

The third interaction was 1:31.154. The featured listing photo was a seller photo of the item being modeled. P4 reacted very positively to this item, stating they "really liked this, it's definitely my style." The listing also featured seller photos of the item on a mannequin and 2 close up photos of the fabric to show detail. They "liked" this item, in order to save it for later, and also stated that they would "probably buy this" after the session was over. They scrolled to see the description, and responded positively to the information provided there, which included measurements. They emphasized the fact that they "scroll right to the measurements to see them, and just skim the rest of [the description]. I usually gravitate towards the photos, though." Images were especially important for P4, as they stated they generally shop for "vintage clothing" which needs to be represented accurately in photos due to "little quirks" that the item may have. Accurate photos and visual content is considered paramount for P4.

Interactions 3, 4, and 5 all occurred within seconds of each other and had similar content consumption behavior. In interaction 6, P4 reiterates what they did for the three previous interactions and goes into more depth about why they chose what they chose. Interaction 3 was 0:11.079. The featured listing photo was a seller photo of the item

folded. In the listing, the other photos were also seller photos of the item folded, laying flat, and a photo of the item's tag. P4 verbally confirms the item, and also "likes" them to save them for later. While they scrolled down to the description, and appeared to scan it, they did not verbally confirm that they read it.

Interaction 4 was 0:09.253. The featured listing photo was a stock image of the item being modeled. P4 opened the listing but did not scroll through the rest of the photos. However, they "liked" the item, and appeared to scan the description, though they did not verbally confirm that they read it. Interaction 5 occurred almost immediately after interaction 4, and was 0:18.394. The featured listing photo was a stock photo of the item being modeled. The listing featured one more stock image, and a seller image of the item's tags. P4 did not verbally confirm the item, though they did "like" it in order to save it for later. They did not appear to read the description.

Interaction 6 was 2:04.481. The moderator prompted P4 to think aloud while they browsed, and so P4 retroactively went through the three previous interactions to elaborate further on the choices they made and why. Concerning interaction 3, P4 stated they liked the fact that the listing clearly states the size and the brand, since they "are familiar with the brand, and if I see it in my size I know it'll fit." They comment on how the item looks in the photo, stating that it looks "brand new" and "not too distressed", despite the fact that the item has intentional distressing that is meant to be aesthetic. P4 did not read the description of the item before liking it. During interaction 4, P4 specifically states that they prefer the "images from the website", stating they they more accurately represent the item in question. This is repeated for interaction 5, where the listing that P4 selected also featured a stock image of the item as its featured listing photo. P4 states that when these

photos are used, they "gravitate" to the listing over seller photos of the item because the stock images are "higher quality, high definition, so you can see the [item] better, and they like the way that [websites] style their models." P4 emphasizes the importance and draw of stock images several more times when elaborating on their browsing habits, underlining the importance of stylized, professional visual content. Outside of interaction 1, P4 did not appear to consume any description or written content in any of the listing.

For the seller portion of the session, P4 described in detail how they would go about listing an item on Depop. For the listing title, P4 used descriptive language for the color, size, and style of the piece, and included the word "vintage". They also stated verbally that they make their listing titles in all capital letters to "catch attention". Their description included details about the item, such as its shape around the neck ("high-necked"), it's condition ("very good vintage condition"), and it's measurements ("vintage clothing tends to run small, please use the following measurements…"). They did not contextualize the item in terms of occasion, but used emojis because "they're cute, and lots of people like them." For visual content, P4 stated that they "use props or decorations in the background… I feel like clothes sell better when [they're staged]. I also take inspiration from other Depop shops."

When fielding questions from potential buyers, P4 placed importance on personal interactions between the buyer and the seller. In particular, they referred to an instance when, after they inquired upon an item, the buyer sent them additional photos via text from their personal phone. This, to P4, "felt more personal, like they cared more about you than just making a sale." To this point, P4 would offer to text potential buyers more

photos of the item, in addition to supplemental written details in the description or comment area of the listing.

Participant 5

Participant 5 (P5) chose Poshmark as their REMSA. There were 4 total events considered relevant for this study, which includes both roles as buyer and seller. As a buyer, 2 events were recorded, and 2 as a seller. Of their buyer interactions, 1 had seller photos only and one 1 had both stock and seller photos.

The duration of the first interaction was 1:49.305. The featured listing photo was a seller photo of the item on a hanger affixed to a wall. Other photos in the listing included more seller photos of the item on a hanger, close up detail photos, and a photo of the item's tag. P5 responded very positively to the listing before scrolling to the description, verbally confirming they would "buy this if this [testing session[were real." They read the description in full and commented on how they appreciated how detailed it was. The seller included a full description of what the item looked like, from details like the neck shape ("deep v-neck"), the back of the item ("low back"), what the skirt looked like ("pleated skirt with hidden shorts underneath"), and the lining ("fully lined so it's not see-through"). P5 appreciated how verbose the seller was, mentioning that there can never be enough information about an item.

The second interaction was 1:20.377. The featured listing photo was a seller photo of the item modeled. Other photos in the listing included additional seller photos of the item being modeled, and also the item folded and laying flat. P5 stated that they "really like that the model put [the item] on herself and… modeled them… It says she's 5,3" and I'm 5'3" so they would fit me that way." The seller also included a stock image of the

item as the final photo. P5 scrolled through the photos to the description and read it in full, stating they appreciated the detail the seller went into concerning the type of item in the listing (“high wise, wedgie fit”).

As a seller, P5 was asked to list a hypothetical item. They emphasized the quality of photos, stating that they “would choose a more curated photo of the [item] because I’ve found that the nicer the photo, the more likely people are to buy it.” The title included descriptors such as the color, size, and material of the item. In the title, P5 emphasized the color, brand, and occasion for the item. In the description, they elaborate further, describing the finer details of the item, such as how often it was worn, the stitching, and also provided further contextualization.

Participant 6

Participant 6 (P6) chose Poshmark as their REMSA. The session was their first time using Poshmark. They were particularly interested in browsing, and so had the highest occurrence of events. There were 17 total events considered relevant for this study, which includes both roles as buyer and seller. As a buyer, 15 events were recorded, and 2 as a seller. Of their buyer interactions, 6 had seller photos only, 5 contained both seller and stock photos, 4 had stock photos only.

The first interaction was 0:06.909. P6 noted that they chose the listing because the item “looks kind of different”, based on the featured listing photo, which was a stock photo of a model wearing the item. The listing contained more stock photos of the item, which P6 scrolled through. They scrolled through the listing to the description, which they did not verbally confirm they read, though they did stop scrolling at that point in the listing. They also mentioned that the item “was not exactly what they were looking for”,

implying that, while they were drawn by the stock photo of the item, it wasn't entirely suitable for them. Regardless, the photo enticed P6 to select the listing and scroll through it.

The second interaction was 0:47.405. The featured listing photo was a seller photo of the item laying flat. Other photos in the listing were also seller photos of the item laying flat, showing close-up detail, and a photo of the tag. P6 verbally confirmed they liked the item before scrolling down to the description, stating that "[the item] is cute and simple, it looks clean, and it still has the tags." They were able to make this decision based on the seller photos alone. After evaluating the photos, P6 scrolled down to the description, and noted that they liked the fact that the seller stated that the item was never worn. Specifically, P6 mentions that because the seller specifically states its never worn in the description, "I'm more likely to be interested in it because it's a white dress, if someone's worn it before and it's dirty you can tell, and that's important."

The duration of the third interaction was 0:23.594. The featured listing photo was a stock image of the item being modeled. P6 verbally confirms they like the item before going into the listing. Once in the listing, other photos of the item are additional stock photos showing the item at different angles, and seller photos of the item on a hanger affixed to a wall. They scroll down to the description, where it mentions that the item was never worn, which P6 states again that they appreciate. In addition to verbally confirming the item, they also "like" it in order to save it for later.

The fourth interaction was 2:04.087. While scrolling through the search results, P6 noted that they "like the fact that some people use props in their photos", in reference to the featured listing photo. They also noted that "it's interesting that some people have

their own photos while others obviously use website photos." Though P6 did not select either of these listings, their mention of the featured listing photos is significant because the difference between seller and stock photos can dictate whether a potential buyer will select a listing. P6 verbally states that they like props in photos, while also appreciating that some people model their items. P6 selects a listing whose featured listing photo is a stock image of a model wearing the item. They state that they selected this one because they "feel like, because [the brand] is in the title, I'm also more likely to look at [the listing] because I'm familiar with and love [the brand]." The listing's additional photos are more stock photos showing the item from different angles, a photo of the tag, photos of the item on a hanger affixed to a wall, and a photo of the length of the item. P6 stated that the item "looks clean and cute" from the photos and verbally confirms the item before scrolling to the description. They also specifically mention that they like the addition of the tag, and the measurements since they "are really tall, and sometimes dresses become shirts on me. I know that this would be long enough without having to ask". Once there, P6 states that they like the fact that "there's a brief description, but not a ton". At this point, P6 sees comments for the first time and stated that they "did not know that people could comment." They proceed to read the comments and note that "the measurements are in response to a question that [another buyer] asked. That's super helpful."

Interaction 5 was 0:44.032. The featured listing photo was a stock photo of the item being modeled. The other photos in the listing were also stock photos, in addition to a screenshot of a sizing chart from a website. P6 selected the listing based on the stock photo, saying it was "cute and long". They scrolled down to the description and verbally

confirmed that they read it. They also verbally confirmed they read the comments left by buyers, and the seller's responses to those comments. In particular, another buyer asked the same question that P6 had in mind regarding the item, and the seller answered it accurately. P6 responded very positively to this, stating "the comments are helpful because they're questions that I would also have [about the item]. So as a customer, I appreciate that the seller was responding to questions, even if I'm not going to buy it. It's helping the person who might potentially buy it, and other people, too."

The sixth interaction was 0:57.684. The featured listing photo was a stock photo of the item being worn by a model. P6 stated that they "just wanted to get a closer look" of the item, so chose the listing in order to zoom in on it. This is considered relevant because they based their interest of the item on the featured listing photo. They were able to zoom in on it to get an idea of the detailing. They did not verbally confirm the item, nor did they like it. After returning to the search results, P6 comments on the featured listing photos as a whole, stating that they "kind of like it when [the item for sale] is on a person, instead of just hanging… [when it's on a person] it looks more professional to me, instead of just lying on the floor or hanging." They elaborated further on the search results and the featured listing photos as a whole, stating that they "like it when it's the original [website] photo or at least on a mannequin so that you can see how it falls." To demonstrate what they don't like, they selected a listing whose featured listing photo was a seller photo of the item on a hanger, hanging from a tree outside. P6 stated, "Like, I don't like this, it's a little harder to imagine on someone."

Interaction 7 was 0:49.106. This consisted of two events, each used to illustrate the type of content that P6 did not like. The first listing in this interaction had a seller

photo of the item laying flat. The other photos in this listing were also seller photos of the item laying flat, depicting different angles and details of the item. P6 stated that they "don't like this very much because it looks messy, and not [enticing]." After stating this, they returned to the search results page and chose another listing whose featured listing photo they did not like because it was a seller photo of the item modeled. They added that seller photos of the item being modeled, presumably by the seller themselves, are not as appealing as stock photos of the item being modeled, due to the fact that "it feels like you're buying it from a person, and its not as new, even if they tags are still on." P6 did not scroll down to or read the descriptions or see if there were comments left on either listing.

Interaction 8 was 0:12. 954. The featured listing photo was a stock image of the item on a model. Other photos in the listing included additional stock photos of the item being modeled, seller photos of the item on a hanger affixed to a wall, and a close-up image of the item's tag. P6 verbally confirmed the item, stating that it was "kinda cute, I like it." They did not read the description before verbal confirmation of the item, nor did they scroll down to see comments.

The ninth interaction was 0:47.479. Before P6 selected the listing, they reiterated that they prefer featured listing photos that "are on someone and modeled so you can see how it looks." However, they chose a listing whose featured photo was a seller photo of the item on a hanger affixed to the wall. The other photos in the listing were also seller photos of the item on a hanger, and also a close up of the tag. They commented on the title, stating they liked the use of the descriptor "extreme" for the style of the item ("extreme high-waisted"). After scrolling passed the photos to the description, they

verbally confirmed that they read it, and appreciated that the measurements were included in the listing.

Interaction 10 was 0:25.205. The featured listing photo was a stock photo of the item being modeled. The listing included additional stock photos, and seller photos of the item on a hanger affixed to the wall. P6 states that they chose this item because the brand was mentioned in the listing title, in addition to the stock photo used as the featured photo. They reiterate the importance of good, descriptive visual content in order to accurately represent the item for sale, and to show how it fits on someone, since "some things, like jeans, have a particular fit and its good to see it on a person to make sure the fit is right."

Interaction 11 was 0:40.805. The event started as P6 scrolled through the search results, evaluating listings based on their featured listing photo. They stated that they "like it when the item is laid out flat instead of folded, you get a better idea of what the [item] looks like." P6 selected a listing whose featured listing photo was a seller photo of the item laying flat. Other photos in the listing were also seller photos of the item laying flat, folded, a close up the tags, and photos of the item with a measuring tape, showing length. P6 responded very positively to this type of photo, as they encountered it in a previous listing. The practice, they claimed, lets them know the exact length immediately, without asking. P6 noted the description, also, and stated they appreciated that the seller responded to comments from other potential buyers. They verbally confirmed the listing and "liked" it to save it for later.

The twelfth interaction was 0:19.330. The featured listing photo was a seller photo of the item folded and included staged props. Other photos in the listing were also

seller photos of the item folded, laying flat, and of the tag. P6 mentions that, while they don't like photos where the item is folded, they like the props, saying "I don't like it folded, but I like the [props] the seller added. It's cute, it shows effort." P6 did not verbally confirm the item, nor did they "like" it to save it for later. Though they didn't confirm all of the listings they chose to consume, the act of looking at them was still worth noting because they've chose to consume these listings over others.

The thirteenth interaction was 0:17.798. The featured listing photo was a stock image of a model wearing the item. Other photos in the listing were also stock photos of the item being modeled from different angles. The last photo in the listing was a screenshot of the size chart, presumably taken from a website. P6 mentions that colloquial terms, such as "mom jeans" can be used on Poshmark to "attract a certain kind of customer, for a certain kind of style." They did not elaborate on this statement. They did not scroll to the description, nor did they verbally confirm it. They did, however, "like" the item in order to save it for later.

Interaction 14 was 0:26.393. The featured listing photo was a seller image of the item laying flat. The other images in the listing were also seller images of the item folded, with staged props, and a closeup of the tag. P6 notes the title, which includes the descriptor "Bestseller". They state this drew them in because it implies that "it's kind of a limited edition. Like this might not be in stores anymore so you can only get it secondhand." They did not verbally confirm the item, nor did they "like" it to save it for later.

Interaction 15 was 2:22.189. While scrolling through the search results page, P6 states that "some of them I would just 'like', and add them to my 'like' list, to save for

later, without actually going into the listing and looking at it more closely. During this interaction, they went into three listings. The first had stock photos of the item being modeled as their featured listing photo. They also had additional stock photos as their supplemental photos once P6 was in the listing. The second listing was very similar to the first, so P6 did not stay long on the listing. They did not scroll down to the description for either of these events. The third listing's featured listing photo was a seller photo of the item modeled. Additional photos were worth noting, as these photos were the only ones in this study that featured the items being worn outdoors in a more "natural" setting. P6 comments that a lot of people "ask questions about measurements. That seems to be popular, because I don't know if you can return on Poshmark or not." They also mention that, while at first they did not like seller photos, over time they became used to them, as the details of the item can be seen in either stock or seller photos.

Interaction 16 had P6 go through the process of listing a hypothetical item. For the title, P6 focused primarily on describing the item itself. They state that they "don't like super cluttered descriptions, almost like a story. Like, I don't like when it says 'perfect for date night'. Just describe the dress." They went on to use descriptors such as "breathable", "not transparent", and "cotton". They also included how many times the item was worn, whether it had any stains or flaws, and the size of the item. They did not have photos of anything readily available, but they state they would use stock photos because "it seems like that's what everyone is using" and they preferred them over seller photos.

For interaction 17, P6 described how they would address questions from potential buyers about the item they have listed for sale. Since this was their first time using

Poshmark, they weren't entirely sure about how to answer questions. They emphasized the importance of being as honest as possible, citing wear and tear on the item, flaws, how many times its been worn, and listing it at a reasonable price.

Discussion of Cumulative Findings

Behaviors are incredibly nuanced and multi-faceted. *Bricolage* and Grounded Theory allowed space for interpretation and reinterpretation in this study. The scope of this study included looking at the consumption by buyers of seller-created content, the content choices that sellers make when listing an item for sale, and how sellers supplement listings with more information when potential buyers feel there is inadequate content in a listing. Discussion of each behavioral interaction will cover patterns identified, contradictions in behavior versus verbal statements, and implications for these behaviors and contradictions.

Due to the primarily qualitative nature of the study, this discussion will not cover the quantitative data that was pulled from the research. However, this data was still important to look at and discuss. For an indepth look at what the quantitative data said, please see Appendix A.

Seller-to-Buyer Content Exchange

Task sessions were split into two phases: participants as the buyer, and participants as the seller. The first phase has two tasks in it, asking participants to 1) search for a specific item for a specific occasion, then 2) browse for an item with a vague concept of what they were looking for. Results varied across all participants regarding the featured listing photo. P1 was recorded at looking at 8 listings whose featured photo was

a stock image, and 4 whose featured listing photo was a seller image. Both P2 and P5 chose more listings with a stock image as the featured listing photo, and one listing with a seller featured photo. P3 was split evenly between stock and seller featured listing photos, P4 had a majority seller featured listing photo, and P6, who had the most recorded relevant events, looked at 8 listings with stock featured listing photos and 7 listings with seller featured listing photos. Ultimately, the more listings the participant interacted with, the less significant the featured listing photo was in their decision-making. This sentiment was echoed by P6, who stated in their session that the more photos they looked at, the less they cared about whether or not it was a stock image from a website or a photo the seller took themselves.

Of the stock image listings that participants looked at, only two participants read the descriptions more than half the time. Two did not look at any descriptions when looking at listings whose featured listing photos were stock images, even if there were supplemental stock and seller images in the listing itself. Featured listing photos played a role in drawing the participant to the listing itself, but once they were in they did not interact with them any long. In fact, comments made by participants during their sessions regarding the listing content focused primarily on the photos that the sellers supplied to supplement the featured listing photo. Often, these supplemental photos contained very relevant information, such as photos of the item being measured, or flaws in the item. Every participant in the study responded positively to photos that included a measuring tape illustrating the length or width of an item. It can be concluded that this is a commom practice when listing items for sale on REMSAs. Participants 1, 3, and 6 even noted the absence of measurements in photos.

P1 expressed confusion between the description and the photos provided by the seller only once. No other participants experienced this, specifically, though other occurrences where miscommunication took place between the sellers and the buyers or where there was a lack of information were recorded. These had a consistent pattern in the types of information that sellers wanted. As stated above, the absence of measurements in photos were noted by three participants. All but one participant noted the absence of measurements in the entire listing, not just the photos. Comment-reading was not a common practice, occurring less than half the time for all participants across all sessions. However, in the instances where comments were read, participants found valuable information there, such as measurements. P1 and P6 both responded very positively when they discovered that another buyer had asked the seller to measure the item. P1 stated, “I would have asked [the seller] if the other person hadn’t. I like when seller’s respond to buyer’s questions.”

The discrepancy between the lack of interest in comments and the valuable information there is significant because buyers may risk disregarding a listing without looking more deeply at it, and sellers risk losing buyers if they do not respond to comments. Beyond this, sellers cannot trust that they include content that is relevant to all buyers, though certain patterns and protocols seem to be upspoken “best practices” when listing an item. The comment section is a very valuable tool for solving any miscommunication or content discrepancy. Both buyers and sellers have a responsibility to acknowledge and use the comment section to account for any potential information discrepancies.

Sellers Listing an Item

The second half of the session was split into two in order to evaluate listing and inquiry response behaviors separately. In the first task of the second half, the participants were asked to list an item for sale. In doing so, they were also asked to elaborate on their choice in content, and what they did and did not include. No quantitative data was collected for this. Rather, notes were taken on qualities, characteristics, and descriptors that the participants chose to include. The broadest commonality across all participants was the importance of honestly when listing. Each participant expressed some kind of desire to be as honest as possible in describing their item, using representative photos of the item, and including any flaws. While the degree of describing the flaws was not elaborated upon, 4 participants specifically cited stains, smells, rips, tears, or loose threads as flaws they would specifically mention.

While honesty was paramount, each participant had a slightly different way of expressing it. None mentioned the inclusion of measurements in their photos or descriptions, though this information was important to them as a buyer. Only two went into depth about what kinds of photos they would include, which were both stock and seller photos. Tag photos were mentioned by three participants, though as buyers five said they appreciated photos of the item tags in listings. The roles of seller and buyer dictate what kind of information the user interacts with. These lenses differ based on personal preference, the context which the user is interacting with the app, how often they use the app, and how comfortable they are with using it.

Most notably, those that chose more listings whose featured listing photo was a stock image of the item did not mention that they would use a stock image for their own

listing. Rather, they emphasized using their own photos that showed close up detail of the item, and the item overall. They did not mention modeling the item for the initial listing, though it was mentioned in regards to answering potential buyer questions. Their personal preference when browsing content as a buyer is slightly different from their content choices as a seller.

Another notable observation relates to the context in which the user is interacting with the application. Newer users and veteran users had higher recorded relevant events, i.e. they selected more listings to look at and browsed the search results page more. Those falling somewhere in between being a new user and a veteran user did not browse as much, nor did they select more listings to evaluate. Rather, they simply completed the task by finding one or two listing that they liked or felt was adequate. This implies that newer users, as a buyer, have the novelty of exploring a new application and interpreting a new kind of information that is being presented to them. As sellers, they indulge in selling listings, choosing characteristics and qualities, and exploring what kind of information they want to communicate to certain sellers. Both newer and veteran users stated that they look to other listings for inspiration. More casual users tended to be straightforward about the information they presented in their listings, though 5 of 6 participants included some kind of contextualization for the item, such as stating what kind of occasion it would be suitable for, what season it could be worn in, or events that it would be appropriate to wear to.

Answering Potential Buyer Questions

As sellers, the participants all had unique ways of answering potential buyer questions. Two thirds of the users stated that they think responsiveness is very important

when selling items. All users expressed similar feelings towards being honest, which mirrored their feelings when creating a listing. However, three participants also stated that, while they would be honest in replying to questions, they would only divulge so much information. Any more than that, and the potential sale of the item could be compromised.

Much of what the participants cited as important when listing an item was not necessarily reflected in the buying and browsing behavior. This difference in preferred content between buyer and seller roles is significant in that two different sets of content are relevant to each role, with some overlap. Each role, therefore, has its own set of information behaviors that are relevant to it.

Recommendations for Further Study

As stated earlier in the limitations, time and resource constraints coupled with COVID-19 greatly impacted the study. That being said, very relevant and important points of interest were identified for future study. In particular, further study on the socioeconomic impacts of information consumption behavior would shed further light onto the choices that buyers make when browsing, and their preferences for certain content over others. It would also inform why sellers choose to highlight certain elements in their listings, and how they choose to visually represent items for sale.

Another factor that would further inform this study is the app itself, and the app's interface design. Poshmark and Depop were both considered for this study, and each has a very distinct user experience. While participants chose which one they wanted to use, the interface design of each was not included in the scope of this study. However, interface design and interaction design play a huge role in governing how different

populations react to applications. This has great potential in the kinds of information that sellers and buyers choose to interact with and communicate.

Moving forward, a larger study with more participants would behoove those interested in looking at the information behaviors of the users of these kinds of applications. This study has served to scratch the surface of a deeper information behavior system that could reveal impactful insights regarding how people interpret important information regarding what they want to buy, why they want to buy it, what and why they want to sell it, and how different factors play a role in the way that people interpret information.

Appendix A: Quantitative Data

While quantitative data is undoubtedly important in any study, no statistically significant data was found here. However, this does not mean it should not be included. When looking at which type of visual data that participants preferred, stock images or seller images, there was a higher variance between stock preference than seller preference. While all participants generally liked seller photos, only two felt strongly either way towards stock photos. Participants tended to look at listings whose featured listing photo was a stock image of the item pulled from a website. Reasons behind this variance could lie in the fact that stock photos clearly communicate what the item looks like when modeled, but seller photos more accurately represent what the item looks like, and so are desired more when the buyer wants to actually purchase an item rather than simply browse what is currently available.

Stock Image Preference	
N	6
Sum	23
Mean	3.8
Median	3.0
Variance	12.2
Standard Deviation	3.5
Range	8.0

Seller Image Preference	
N	6
Sum	17
Mean	2.8
Median	2.0
Variance	5.8
Standard Deviation	2.4
Range	7.0

Where n = total number of participants and sum = total of events containing the type of image (stock or seller).

Appendix B: Terms Used

Terms found in this study include:

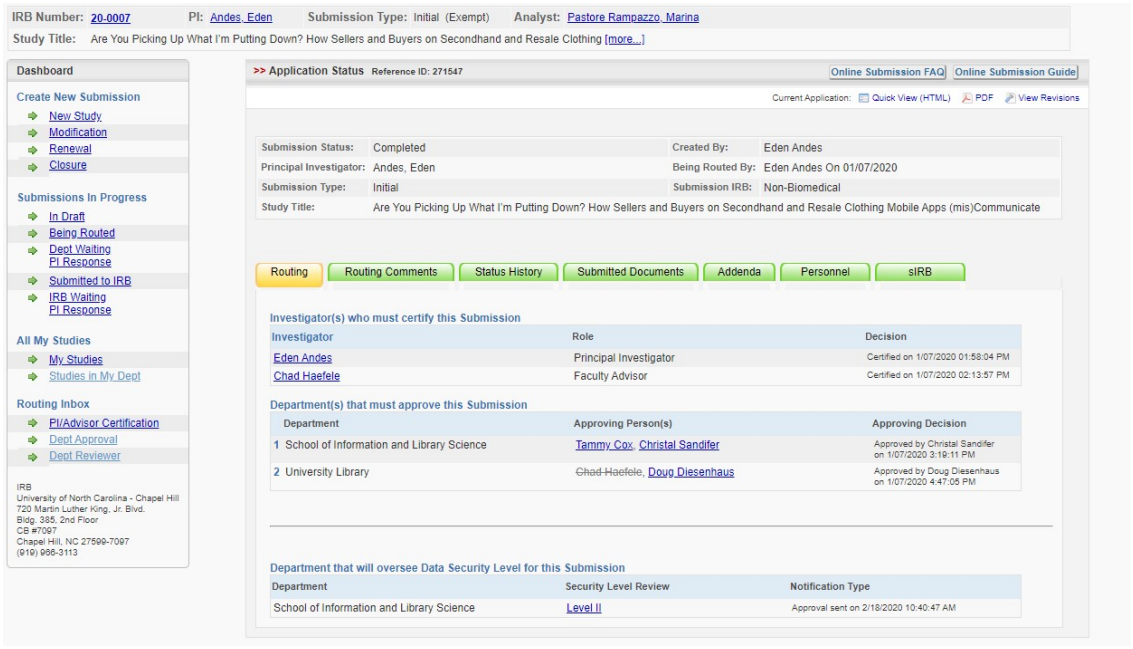
REMSAS: An acronym created by the researcher, stands for Resale and Secondhand Clothing Mobile Shopping Applications

Featured Listing Photo: The photo that the seller has chosen to represent their item for sale. This appears in search result pages.

Stock Photos: Any photos of items taken from a website or other source that was not created by the seller. Instead, these photos are generally professional photos featuring model wearing the item, and styled in a certain way in order to make the item more appealing.

Seller Photos: Any photo taken by the seller to represent the item they are selling. There are several sub-categories of seller photos, including modeled seller photos were the sellers are modeling the item themselves, photos of the tags on the item, photos of the items on hangers or mannequins, close up photos of details or flaws of the item, photos of the item laying flat, or photos of the item folded.

Appendix C: IRB Approval Letter



IRB Number: 20-0007 PI: Andes, Eden Submission Type: Initial (Exempt) Analyst: Pastore Rampazzo, Marina

Study Title: Are You Picking Up What I'm Putting Down? How Sellers and Buyers on Secondhand and Resale Clothing [more...]

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Current Application: Quick View (HTML) PDF View Revisions

Submission Status:	Completed	Created By:	Eden Andes
Principal Investigator:	Andes, Eden	Being Routed By:	Eden Andes On 01/07/2020
Submission Type:	Initial	Submission IRB:	Non-Biomedical
Study Title:	Are You Picking Up What I'm Putting Down? How Sellers and Buyers on Secondhand and Resale Clothing Mobile Apps (mis)Communicate		

Routing | Routing Comments | Status History | Submitted Documents | Addenda | Personnel | sIRB

Investigator(s) who must certify this Submission

Investigator	Role	Decision
Eden Andes	Principal Investigator	Certified on 1/07/2020 01:58:04 PM
Chad Haefele	Faculty Advisor	Certified on 1/07/2020 02:13:57 PM

Department(s) that must approve this Submission

	Department	Approving Person(s)	Approving Decision
1	School of Information and Library Science	Tammy Cox, Christal Sandifer	Approved by Christal Sandifer on 1/07/2020 3:19:11 PM
2	University Library	~~Chad Haefele~~, Doug Diesenhaus	Approved by Doug Diesenhaus on 1/07/2020 4:47:05 PM

Department that will oversee Data Security Level for this Submission

Department	Security Level Review	Notification Type
School of Information and Library Science	Level II	Approval sent on 2/18/2020 10:40:47 AM

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